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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,633	04/15/2004	Gary Dilling	446-011602-US (PAR)	9000

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PERMAN & GREEN
425 POST ROAD
FAIRFIELD, CT 06824

EXAMINER

SHARP, JEFFREY ANDREW

ART UNIT	PAPER NUMBER
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3677

DATE MAILED: 11/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/825,633	Applicant(s) DILLING, GARY	
	Examiner Jeffrey Sharp	Art Unit 3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/15/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

- [1] Claims 1-5 are pending.
- Claims 6-10 are cancelled.

Claim Rejections - 35 USC § 102

- [2] The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- 3 [3] Claims 1-3, ^{4 and} and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Stacy US-5,957,645.

In its broadest sense, Stacy substantially teaches:

A fastener having a recess constructed to have a partial interference fit with an associated driver for removably engaging said driver and said fastener, said fastener having a shank with longitudinal axis, said shank constructed having the recess formed at its end, the recess having a central portion and a plurality of wings (22) radiating outwardly from the central portion, each of

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the wings having an installation wall (24) and a removal wall (26), the wings being configured so that at least one of the installation or removal walls defines a segment of a spiral, said recess further comprising: a transition surface (32) connecting said installation and removal walls of adjacent wings, said transition surface extending from a top portion of said recess to a bottom portion of said recess; an interference surface constructed as portion of said transition surface, said surface having a first radial distance from the longitudinal axis at a top portion thereof to a second radial distance from said longitudinal axis at a bottom portion thereof; and wherein said first radial distance is larger than said second radial distance.

As for Claim 2, Column 2 lines 50-53 suggests "an angle with a line parallel to said longitudinal axis in a range of between .5 degrees to 2 degrees".

As for Claim 3, Stacy broadly teaches "transition surfaces" (32) that are diametrically opposed. Any surface that makes contact with a driver may be broadly construed as an "interference surface" or "interference fit", and thus the "transition surfaces" taught by Stacy cooperate to form an "interference fit" with a driver configured to engage the recess".

As for claim 4, in its broadest sense, the interference surfaces taught by Stacy are constructed to provide an interference with a forward portion of a driver (in order to provide a means for applying a torque at the leading or "forward" edge), and allow surface to surface contact between the driver and wings at a rearward position of the driver (where the driver tip axially tapers off).

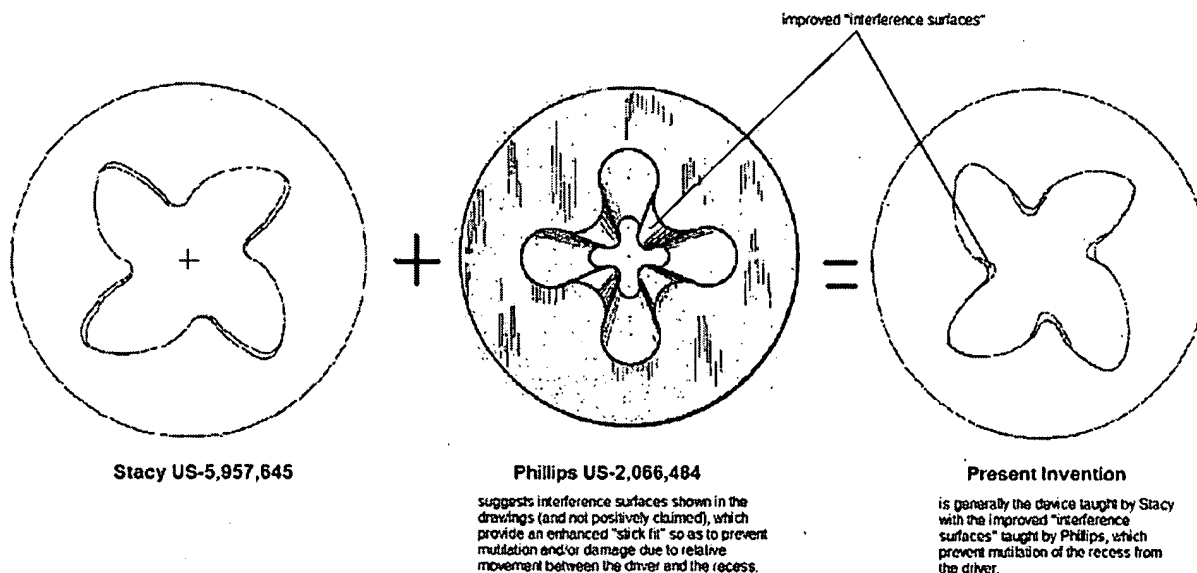
As for Claim 5, the first radial distance is formed substantially "according to a standard recess opening of a spiral type recess".

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Conclusion

[4] The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is as follows:

US 20050232722 A1	US-PGPUB	Dilling, Gary
US 2066484 A	USPAT	PHILLIPS HENRY F
US 2285460 A	USPAT	PURTELL WILLIAM A
US 3170364 A	USPAT	JOHNSON ROBERT K et al.
US 3331274 A	USPAT	MARVIN WALTON
US 3673912 A	USPAT	Herr; George E.
US 4171662 A	USPAT	Simone; James V. et al.
US 5279190 A	USPAT	Goss; David et al.
US 5291811 A	USPAT	Goss; David
US 5598753 A	USPAT	Lee; James S.
US 5931706 A	USPAT	Bassi; Alberto
US 6234914 B1	USPAT	Stacy; W. Dodd
US 6361258 B1	USPAT	Heesch; Gary V.
US 6367358 B1	USPAT	Stacy; W. Dodd
US 6575061 B2	USPAT	Wagner; John B.
US 6655888 B2	USPAT	Schultz; Dennis
US 6698315 B1	USPAT	Wright; Richard B.
US 6698316 B1	USPAT	Wright; Richard B.
US 6725746 B1	USPAT	Wright; Richard B.
US 6904833 B2	USPAT	Wright; Richard B.
US RE24878 E	USPAT	Smith et al.



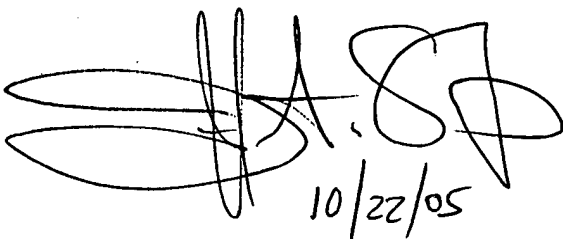
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[5] Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Sharp whose telephone number is (571) 272-7074. The examiner can normally be reached 7:00 am - 5:30 pm Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached on (571) 272-7075. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAS



10/22/05



ROBERT J. SANDY
PRIMARY EXAMINER